

Remarks

Claims 1, 3, 5-7, 9-11, 13, 15-17 and 19-21 were pending, and Claim 20 has been cancelled without prejudice above. Upon entry of the amendment, claims 1, 3, 5-7, 9-11, 13, 15-17, 19, and 21 will be pending and in condition for allowance. Enclosed herewith is Applicant's Second Supplemental Information Disclosure Statement.

The objection to claim 20 is rendered moot by the cancellation of this claim without prejudice.

The rejection under Section 102(b) is respectfully traversed. The present invention provides an *endovascular* graft comprising an expandable stent portion and a stent cover portion, wherein the stent cover portion is coated on its *outer surface* with a bioactive agent covalently attached in the form of a *thin, conformal* coating in a manner sufficient to promote initial thrombus formation. The specification takes pains to explain the differences between an endovascular graft, of the type used in the present invention, and a conventional vascular graft. The former is considerably smaller, for use *within* an existing vessel, and in the context of the present invention, has an outer surface coated to promote thrombus formation and thereby prevent endoleaking. The latter, by contrast, is typically larger, used as a vessel replacement or shunt, and if coated at all would tend to be coated on its interior, luminal surface in order to promote cell spreading and/or to act as a barrier to blood flow through the walls of the graft.

Drumheller is largely concerned with a particular manner of coating, in which a hydrophilic surface is provided by first adsorbing a polymeric surfactant onto a surface, crosslinking the surfactant to provide a first layer, and then covalently attaching a hydrophilic polymer to form a second layer, to which cells or bioactive agents can be attached. While ignoring the many differences between this coating and the thin, conformal coatings of the present invention, the Action refers to a laundry list of possible applications for the coatings of Drumheller – which includes the ability to coat *vascular* grafts or to immobilize various bioactive species.

It can be seen, however, that the reference fails to teach, or suggest, the ability to achieve a thin, conformal coating at all, let alone on an *endovascular* graft, and hence seems no closer than the various other examples of vascular graft coatings described and distinguished in background of the present specification. The specification goes on to explain the manner in which vascular grafts are physically different, used for different purposes, and hence pose different challenges, as compared to endovascular grafts.

The rejection under Section 103 is respectfully traversed. Guire appears to be cited for its teaching of the use of photoreagents to attach bioactive agents to a surface, including again the surface of a *vascular* graft. The description in the Action of a vascular graft serving “as part of an endovascular stent-graft” clearly misses the key distinctions raised above and in the specification regarding these various devices.

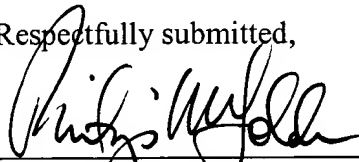
Similarly, the Action's focus on Marin et al. as permitting fixation of an endovascular graft "without sewing" appears to somehow equate this feature with the use of the present coating to prevent endoleaking. Instead, Marin et al. merely provides an example of a typical endovascular graft, of a type that could be coated in the manner of the present invention, though the reference itself fails to teach or suggest any such coating. Nor do the references themselves suggest any such combination, or even if combined would they provide a device as presently claimed.

Accordingly, entry of the present Amendment and reconsideration of the pending rejection is respectfully requested. The Examiner is encouraged to telephone the undersigned in the event any remaining issues arise.

The Commissioner is hereby authorized to charge any additional filing fees required to Deposit Account No. 061910. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,



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